shall be added to any uniform equivalent dose also received by the skin and recorded as the equivalent dose to any extremity or skin for the year. H is the equivalent dose averaged over the 1 cm^2 of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm^2 divided by 100 cm^2 (*i.e.*, H = fD). In no case shall a value of f less than 0.1 be used.

(3) *Area of skin irradiated is less than 10 cm^2.* The non-uniform equivalent dose shall be averaged over the 1 cm^2 of skin receiving the maximum dose. This equivalent dose shall:

(i) Be recorded in the individual's occupational exposure history as a special entry; and

(ii) Not be added to any other equivalent dose to any extremity or skin for the year.

[58 FR 65485, Dec. 14, 1993, as amended at 72 FR 31926, June 8, 2007]

§ 835.206 Limits for the embryo/fetus.

(a) The equivalent dose limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 Sv).

(b) Substantial variation above a uniform exposure rate that would satisfy the limits provided in §835.206(a) shall be avoided.

(c) If the equivalent dose to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 Sv) by the time a worker declares her pregnancy, the declared pregnant worker shall not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.

[58 FR 65485, Dec. 14, 1993, as amended at 72 FR 31926, June 8, 2007]

§ 835.207 Occupational dose limits for minors.

The dose limits for minors occupationally exposed to radiation and/or radioactive materials at a DOE activity are 0.1 rem (0.001 Sv) total effective dose in a year and 10 percent of the occupational dose limits specified at §835.202(a)(3) and (a)(4).

[72 FR 31926, June 8, 2007]

§ 835.208 Limits for members of the public entering a controlled area.

The total effective dose limit for members of the public exposed to radiation and/or radioactive material during access to a controlled area is 0.1 rem (0.001 Sv) in a year.

[72 FR 31926, June 8, 2007]

§ 835.209 Concentrations of radioactive material in air.

(a) The derived air concentration (DAC) values given in appendices A and C of this part shall be used in the control of occupational exposures to airborne radioactive material.

(b) The estimation of internal dose shall be based on bioassay data rather than air concentration values unless bioassay data are:

(1) Unavailable;

(2) Inadequate; or

(3) Internal dose estimates based on air concentration values are demonstrated to be as or more accurate.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

Subpart D [Reserved]

Subpart E—Monitoring of Individuals and Areas

§ 835.401 General requirements.

(a) Monitoring of individuals and areas shall be performed to:

(1) Demonstrate compliance with the regulations in this part;

(2) Document radiological conditions;

(3) Detect changes in radiological conditions;

(4) Detect the gradual buildup of radioactive material;

(5) Verify the effectiveness of engineered and administrative controls in containing radioactive material and reducing radiation exposure; and

(6) Identify and control potential sources of individual exposure to radiation and/or radioactive material.

(b) Instruments and equipment used for monitoring shall be:

(1) Periodically maintained and calibrated on an established frequency;

(2) Appropriate for the type(s), levels, and energies of the radiation(s) encountered;